# ibpsaNEWS

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The journal of the International Building Performance Simulation Association



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# Forms:

IBPSA Central Membership form IBPSA Publications order form IBPSA Regionalization Guide



The International Building Performance Simulation Association (IBPSA) exists to advance and promote the science of building performance simulation in order to improve the design, construction, operation and maintenance of new and existing buildings worldwide.

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Vice-President and Conference Liaison Officer Jan Hensen Eindhoven University of Technology, Netherlands jahe@fago.bwk.tue.nl

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# President's message

IBPSA Members and Friends,

Greetings from Oklahoma! The IBPSA board spent two days hard at work last month in Eindhoven. Some of the results appear elsewhere in the newsletter. Allow me to call your attention to a few highlights:

- The Bylaws Revisions were passed by the membership. This will allow us to move forward with electronic voting, full recognition of regional affiliates and regional representation on the board. Every region will be asked to appoint a representative to the board.
- The IBPSA Awards program will be expanded next year to include a new award to recognize significant contributions to the effective application and/or advancement of building simulation in practice. The IBPSA Outstanding Practice Award may be made to an individual, a group, or a firm. Nominations for this award, as well as the IBPSA Distinguished Service Award and the IBPSA Outstanding Young Contributor Award should be submitted to Terry Williamson

(twilliam@arch.adelaide.edu.au) by 15 January 2003 — more details on page 8.

• The board approved the establishment of a student travel grant program for the next conference. The intention is to encourage graduate student participation. Full details will be announced shortly.

Besides the formal business conducted, holding the meeting in Eindhoven gave the board a chance to see the conference facilities and spend some time in the city. The conference facilities are modern, comfortable, and compact. The hotels and city center are a short distance from the conference site, and all are within easy walking distance of the train station. It is possible to fly to Eindhoven, but travel via train from Amsterdam Schiphol airport is quite simple and takes less than two hours. Eindhoven is also conveniently situated for pre- or post-conference vacationing. In short, we look forward to a great conference!

In other news, several of the regions have had meetings recently. I participated in the IBPSA Canada meeting in Montreal - eSim 2002, which had over a hundred participants. Having the chance to see old friends and meet new ones, enjoy the local cuisine and hospitality, and see what others are working on made it very worthwhile. Kudos to the conference organizers for a well-run conference!

More information on all regional activities can be found in this newsletter. As you can see, there is quite a bit going on, and plenty of room for more activities. I'm looking forward to seeing some of you at System Simulation in Buildings 2002, others at IBPSA-USA meetings, and many of you in Eindhoven.

Best wishes,

Spitter

Jeff Spitler, President, IBPSA



# **IBPSA Central contacts**

# **Membership Services and Publications**

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IBPSA Central membership form

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Publications order form For Proceedings of past IBPSA conferences contact: Jeff Haberl (IBPSA Membership Services Officer) Texas A&M University Energy Systems Laboratory College Station, TX 77843-3581 USA Tel.: +1-979-845-6065 Fax: +1-979-862-2457 Email: jhaberl@esl.tamu.edu

# **Newsletter submissions**

To submit Newsletter articles and announcements, contact: Larry Degelman (Newsletter Chairman) Texas A&M University 2206 Quail Run College Station, TX 77845 USA Tel.: +1-979-696-2506 Fax: +1-979-696-2506 Email: larry@taz.tamu.edu

# **IBPSA Building Simulation conferences**

For information about IBPSA Building Simulation conferences, contact: Jan Hensen (Vice Pres., Conf. Liaison) Eindhoven University of Technology Group FAGO - HG 10.80 P.O. Box 513 5600 MB Eindhoven The Netherlands Tel: +31 40 247 2988 Fax: +31 40 243 8595 Email: jahe@fago.bwk.tue.nl

# **IBPSA Website**

For full information on how to order IBPSA's publications, or to look at Proceedings of past IBPSA Building Simulation conferences or past IBPSA Newsletters, please look on the IBPSA Website at: www.ibpsa.org.

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# **IBPSA Regional affiliates**

For information on joining IBPSA, please contact your nearest regional affiliate. If there is no affiliate in your region, join IBPSA by using the Central membership form.

# EXEMPLATION ADDRESS

IBPSA Central membership form

#### IBPSA-Australasia:

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#### IBPSA-Czech Republic: Frantisek Drkal

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(continued on next page)



# **IBPSA Regional affiliates (continued)**

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# **IBPSA Management Board**

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Karel Kabele (Secretary), Czech Technical University in Prague, Czech Republic Email: kabele@fsv.cvut.cz

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Philip Haves (At-Large), Lawrence Berkeley National Laboratory Email: phaves@lbl.gov

Terry Williamson (At-Large), The University of Adelaide, Australia Email: twilliam@arch.adelaide.edu.au

# **Building Simulation 2003**



# 11 - 14 August 2003 Building Simulation 2003 8th International Building Performance Simulation Association CONFERENCE + EXHIBITION Eindhoven,Netherlands

BS'03, the 8th biennial IBPSA conference, will be the main event in the field of building performance simulation next year. Organised jointly by IBPSA Netherlands + Flanders, the Technical University of Eindhoven (TU/e) and the Center for Building and Systems TNO, and supported by sponsors such as ASHRAE and REHVA, it will take place in the vibrant modern city of Eindhoven, in the centre of Europe.

Key features include:

- a new, three-and-a-half day format
- a wide range of topics including building physics, heating, ventilation and air-conditioning systems, other building services, energy supply systems, human factors, and advances and recent developments in modeling and simulation technology
- keynote speeches by a world-renowned architect and a world-famed consulting engineer
- an exhibition
- social events, an accompanying person program, and post-conference tours
- proceedings available printed and on CD-ROM.

## Calendar

The next important dates are:

- 15 February 2003: manuscripts due from authors
- 15 June 2003: deadline for early registration full conference fees go up from EUR 280 to EUR 350 after this date

## **Contact details**

Congress Office - Building Simulation 2003phone: +31-40-247-4000Technische Universiteit Eindhovenfax: +31-40-245-8195P.O. Box 513email: bs2003@tue.nl5600 MB EINDHOVEN, Netherlands

For the latest information, consult the conference website www.bs2003.tue.nl

# **IBPSA Awards 2003**

The next IBPSA Awards will be announced at Building Simulation 2003. The regulations say:

The International Building Performance Simulation Association (IBPSA) will make awards for contributions to the field of building performance simulation in three categories. One award (or more at the discretion of the Board of Directors) will be made biennially in each category and will be announced at each Building Simulation Conference. The awards are:

#### IBPSA Award for Distinguished Service to Building Simulation

This award recognizes an individual who has a distinguished record of contributions to the field of building performance simulation, over a long period. The award consists of a certificate and \$US500.

#### IBPSA Outstanding Young Contributor Award

This award recognizes an individual at the beginning of their career who has demonstrated potential for significant contributions to the field of building simulation. The award consists of a certificate and \$US500.

#### **IBPSA Outstanding Practice Award**

This award recognizes an individual, group or firm who has made significant contributions to the effective application and/or advancement of building simulation in practice. The award consists of a certificate and \$US500.

No member of the IBPSA Board of Directors shall be eligible for nomination to an award. The IBPSA Board of Directors will make the final decision regarding the recipient of an award.

Nominations for the Distinguished Service Award should be accompanied by a brief CV, which gives the individual's history of involvement with building performance simulation, their publications etc, and a summary of their contributions to the field.

Nominations for the Outstanding Young Contributor Award should be accompanied by a brief CV, which gives a summary of the individual's contributions to the field, their publications etc, and an assessment of potential for future contributions.

Nominations for the Outstanding Practice Award should be accompanied by a summary of the individual's, group's or firm's contributions to the field, and an assessment of the significance of their contributions.

Nominations for 2003 awards should be sent to the chair of the Awards Committee, Terry Williamson (twilliam@arch.adelaide.edu.au) no later than 15 January 2003.



President Roger Pelletret presents the Distinguished Service Award to Ed Sowell at BS'01 in Rio IBPSA Awards 2003

#### Past recipients of awards

#### Distinguished Service Award

1991 Gint Mitalas (Canada) 1993 Tamimi (Tom) Kusuda (U.S.) 1995 George Walton (U.S.) 1997 Jean Le Brun (Belgium) 1999 Joseph Andrew Clarke (Scotland) 2001 Edward F. Sowell (US)

#### Young Achiever Award

1991 Jeffrey Spitler (U.S.)
1993 James Braun (U.S.)
1995 Jean-Michel Nataf (France)
1997 Veronica Soebarto (Indonesia)
1999 Martin Moeck (US)
2001 Ian-Bausoleil Morrison (Canada)

The first holder of the newly-instituted **Outstanding Practitioner Award** will be announced at Building Simulation 2003.



Ian Beausoleil-Morrison shows off his Outstanding Young Contributor Award 2001

# **Other forthcoming events**

# Calendar

Date		Event	Venue
2002			
November	28-29	German TRNSYS training	Stuttgart, Germany
December	<sup>-</sup> 16-18	System Simulation in Buildings	Liège, Belgium
2003			
March	21	German TRNSYS user day	Stuttgart, Germany
March	24-26	5th French & European TRNSYS user meeting	Nice, France
April	28	Indoor air quality in museums and historic properties	Norwich, UK
April - Nov	vember	TRNSYS simulation course, Hogskolan Dalarna Ur	niversity, Sweden
August	11-14	BS'2003	Eindhoven, Belgium
August	18-20	Belgian TRNSYS user meeting	Liège, Belgium
October		US TRNSYS user days	Madison, Wi, USA

16-18 December 2002 Liège, Belgium http://ltd27.meca.ulg.ac.be/ssb/



# **6th International conference on System Simulation in Buildings**

This 6th SSB conference, like its five predecessors, is being organized in close cooperation with the International Energy Agency group on "Energy Conservation in Building and Community Systems" (IEA-ECBCS) and the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE). Highlights will include the presentation of final results from the IEA-ECBCS Annex 34 on "Practical Applications of Fault Detection and Diagnosis Techniques in Real Buildings" and of information about the new Annex 40 "Commissioning".

There will be sessions on:

- Building and Fluid Flow modeling (4 papers)
- HVAC components and system modeling (10 papers in 3 sessions)
- System simulation methods and tools (7 papers in 2 sessions)
- Application to control (11 papers in 3 sessions)
- Application to energy management and to maintenance (4 papers)
- Application to commissioning and retrofit (4 papers)

The official conference language is English.

A full programme, including details of all the papers to be presented, is available on the web at http://ltd27.meca.ulg.ac.be/ssb/. The final Abstracts of the papers will be posted on the site before the conference. A CD-ROM with the papers will be forwarded

to registrated participants before the conference. All papers, along with questions and comments that are generated at the presentation, will be included in a CD-ROM sent to all participants after the conference. A printed version will also be available on request.

The deadline for reduced registration fees has passed, but places may still be available if you book quickly!

#### 23-28 April 2003 Norwich, UK www.uea.ac.uk/~e620/ IAQ2003.htm

# Indoor Air Quality in Museums and Historic Properties University of East Anglia

This will be the fifth annual conference in a series on Indoor Air Pollution in cultural environments. It will follow the format of its predecessors at Glasgow, Amsterdam, Oxford and Copenhagen, but with a special focus on risks to objects on open display. The organizers hope to draw additional interest from people concerned with potential damage to items within historic properties.



There will be four main themes: Dust and Particles, Deposition of Gases to Indoor Surfaces, Air Quality Issues in Cultural Environments, and the use of the IMPACT (Innovative Modelling of Museum Pollution And Conservation Thresholds) model developed in an EC-funded research project to help museums control of damaging gaseous pollutants. The final deadline for submission of titles and abstracts is 30 November 2002.

The delegate fee of £65 (rising to £75 after 31 January 2003) includes an evening boat trip around Norwich and all tea/coffee breaks, but not accommodation or meals. Affordable accommodation may be available on campus for delegates who book early.

Further information and forms for registering interest online are available at www.uea.ac.uk/~e620/IAQ2003.htm; alternatively, contact iaq2003@uea.ac.uk.

#### TRNSYS training and user events Stuttgart, Nice, Hogskolan Dalarna University, Sweden, Liège and Madison, Wi

Further information about these events is available from:

28-9 Nov 02 & 21 March 03, Stuttgart:	hotline@transsolar.com
24-6 March 03, Nice:	software@cstb.fr
April - November 03, Hogskolan Dalarna U	niversity:
www2.du.se/utbildning/visa_kurs.as	sp?kod=MÖD017&language=en
18-20 August 03, Liège:	o.cardol@ulg.ac.be
October 03, Madison, Wi:	bradley@tess-inc.com

For an updated list of TRNSYS events, consult CSTB's web site at http://software.cstb.fr/main/events.asp?langue=us&context=&m=ho.

# Announcements



Menories of Rio - Copacabana beach

# **Building Simulation '01 proceedings now online**

The proceedings of IBPSA's 7th international conference, held in Rio de Janeiro on 13-15 August 2001, are now online and downloadable as pdf files at www.ibpsa.org/ bs\_01.htm — a total of over 170 papers.

They join downloadable proceedings of 7 previous conferences: IBPSA's previous biennial Building Simulation conferences from 1989 onward, and the Building Energy Simulation conference held in 1985.

# **Job Opportunity**

The University of Wisconsin-Milwaukee School of Architecture and Urban Planning is seeking a new full-time Assistant or Associate Professor. Applicants must have a professional degree (or be about to graduate) in architecture, preferably with expertise in environmental technology, materials science, and/or structural systems. Applications must be postmarked no later than 1 December 2002.

Full details are on the UWM web site at http://www.uwm.edu/SARUP/jobs/ archpositon.html.

## **Colorado State University research programme**

Colorado State University has a joint research programme by Mechanical Engineering, Computer Science and Electrical and Computer Engineering that addresses 'Robust Reinforcement Learning Control' for Building Energy Systems and should interest IBPSA members. It is led by Douglas Hittle, a Mechanical Engineering faculty member and Director of the Solar Energy Applications Laboratory.

For more details, visit their web site at **www.engr.colostate.edu/nnhva**c. Colorado State has been working on reinforcement learning since 1995 and many papers by project members are available to download on the site.

# **News from Affiliates**

## **IBPSA-Australasia**

Veronica Soebarto, University of Adelaide

IBPSA-Australia has 34 members from universities, professional and research institutions and operates as a loose association supported by members' contributions. Its main activities are e-mail contacts and an annual seminar. This year's seminar was held at Deakin University, Warrnambool on 1 November, immediately before the ANZASCA (Australia and New Zealand Architectural Science Association) Conference. Topics included the use of simulation tools for industry, the role of simulation in building rating schemes, simulating reality, and simulation and teaching.

Apart from the seminar, IBPSA-Australasia has not been too active this year, although there have been communications through e-mail about what we can/should do; the main problem is that only a few members take part in the e-mail discussions. We welcome new members: if you would like to join us, email me at veronica@arch.adelaide.edu.au.

There is more information about us and our activities on our web site, currently hosted at www.arch.adelaide.edu.au/~ibpsa.

Full contact information for IBPSA-Australasia is on page 4

Australia is participating in IEA Task 22 on Building Energy Analysis Tools, represented by P C Thomas from Energy Partners. He can be contacted at pc.thomas@unsw.edu.au.

# **IBPSA-Brazil**

#### **History and structure**

IBPSA-Brazil started up in 2001 and is now a legally incorporated organisation with 22 members. It currently charges no membership fees, relying on profit from locally organized meetings.

The current board comprises Roberto Lamberts (President, lamberts@labeee.ufsc.br), Nathan Mendes (Vice-President, nmendes@rla01.pucpr.br), Cezar Otaviano Ribeiro Negrão (Secretary, negrao@cefetpr.br), José Antonio Bellini da Cunha Neto (Treasurer, bellini@lmpt.ufsc.br), and Counsellors Antônio César Silveira Baptista da Silva (Antonio@labeee.ufsc.br), Fernando Oscar Ruttkay Pereira (feco@arq.ufsc.br), Fernando Simon Westphal (Fernando@labeee.ufsc.br), Joyce Correna Carlo (joyce@labeee.ufsc.br) and Luís Mauro Moura (lmoura@ccet.pucpr.br). IBPSA-Brazil has been very active since its launch. In August 2001:

- Building Simulation 2001 took place
- the first draft of the IBPSA-Brazil home page went live
- a discussion group was created at ibpsa-br@grupos.com.br, and
- the Proceedings of IBPSA Conferences before Prague (1997) were put onto CD-Rom, with a search facility.

In September 2002 the definitive version of the IBPSA-Brazil home page became available, and in October IBPSA-Brazil held its first workshop during the 9th Brazilian Congress of Thermal Engineering and Sciences (ENCIT) in Caxambu city, Minas Gerais.

#### The future

IBPSA-Brazil's second workshop will be held during the VII ENCAC-COTEDI (Latin American Conference on Thermal Comfort and Building Performance) in Curitiba on 5-7 November 2003.

We will be updating the collection of the Proceedings of IBPSA Conferences to cover the whole period from 1985 to 2001.

Full contact information for IBPSA-Brazil is on page 4

Finally, we hope to recruit new members though a series of local workshops to be held next year.

# **IBPSA-Canada**

Ian Beausoleil-Morrison, Natural Resources Canada

#### **History and activities**

The formation of an IBPSA-Canada affiliate was first proposed in June 2001 at the end of the Canadian two-day conference on building energy simulation, eSim 2001, organized by the CANMET Energy Technology Centre of Natural Resources Canada. This conference brought together 90 people from the academic, government research, and private-sector communities who had an interest in building performance simulation. There was a broad consensus that IBPSA-Canada should be formed, and nine volunteers stepped forward to serve as its board for one year to shape the organization. There was also consensus among the eSim 2001 delegates that one of the prime activities of IBPSA-Canada should be the organization of conferences like eSim.

During its first year of operation (July 2001 to June 2002), the IBPSA-Canada board:

- established a governing charter
- launched a web site, www.IBPSA.ca
- opened IBPSA-Canada for membership in April 2002, offering two membership grades (individual and corporate)

- organized the eSim 2002 conference, and
- selected a board for IBPSA-Canada's second year. The members this year are Ian Beausoleil-Morrison (CANMET Energy Technology Centre, President), Radu Zmeureanu (Concordia University, Vice President), Steve Carpenter (Enermodal Engineering), Curt Hepting (EnerSys Analytics), Laurier Nichols (Dessau Soprin), Chris Jones (EnerSys Analytics), Ismet Ugursal (Dalhousie University), Ted Kesik (University of Toronto), Morad Atif (National Research Council) and Jeff Blake (CANMET Energy Technology Centre).

During the first three months of its second year of operation (July to September 2002), the board:

- selected a president and vice-president
- held the eSim 2002 conference.

#### eSim 2002

eSim 2002, the Canadian conference on building energy simulation, was organized by IBPSA-Canada and hosted by Concordia University's Centre for Building Studies in Montréal from September 11 to 13. The conference was sponsored by:

- Concordia University
- Natural Resources Canada (federal government)
- Hydro-Québec (electric utility)
- Ministère de la Recherche, de la science, et de la technologie du Québec (provincial government)
- ASHRAE-Châpitre de Montréal (local ASHRAE chapter)

eSim 2002 brought together more than 100 delegates from government labs, universities, and private industry. The majority of the delegates were from Canada with the remainder coming from Europe, the USA, and Japan. The threeday conference featured 36 full-length peer-reviewed technical papers, a software "shootout", workshops on ESPr and EnergyPlus, and invited lectures on the future trends in simulation.

Hard copies of the conference proceedings were distributed to delegates, and PDF versions of all the papers will be freely available from the



IBPSA-Canada web site in the near future. This web site also contains the final conference programme, photographs, and the results of a post-conference survey.

The proceedings from the eSim 2001 conference are also on the IBPSA-Canada web site.



#### Structure

IBPSA-Canada operates as a network of volunteers rather than an incorporated organization, and as such does not hold finances. Operational expenses such as hosting the web site, registering the domain name, and the costs of quarterly board tele-conferences are absorbed by the board members or their employers. IBPSA-Canada's major activity, the organization of the bi-annual eSim conference, is done in partnership with a conference host. IBPSA-Canada organizes the conference while the host provides the facilities, collects registration fees and sponsorship funds, and is responsible for meeting logistics and costs. In practice, the eSim host must be an active member of IBPSA-Canada for this formula to work, as was the case with eSim 2002.

IBPSA-Canada has two membership grades: individual and corporate. Any individual working in Canada in the field of building simulation can become an individual member of IBPSA-Canada. Any organization (a company, university group, government agency, etc) based in Canada and active in the field of building simulation can become a corporate member of IBPSA-Canada. Both membership grades are free. Membership registration is via the **IBPSA-Canada web site**. To date, there are 38 individual members and 4 corporate members.

#### The future

One of the organization's key challenges over the coming months is to boost membership from the current modest level. For starters the 100 delegates who attended eSim 2002 will be asked to join IBPSA-Canada.

The IBPSA-Canada board is exploring a number of methods to achieve its objective of providing a forum for the exchange of information between Canadian practitioners and researchers on the topic of building performance simulation. Projects which IBPSA-Canada intends to pursue over the coming two years include:

- another eSim conference, to be held in 2004
- expanding the web site to include such features as a directory of simulation tools and postings for job openings in the simulation field
- actively seeking members to build the membership to a level that will be significant for obtaining sponsorship for eSim and potentially other activities. To this end, we are considering delivering presentations to the architectural and engineering consulting community that explains what simulation is and how it can be beneficial to them.

Full contact information for IBPSA-Canada is on page 4

# **IBPSA-Czech Republic**

Frantisek Drkal

#### **History and structure**

IBPSA-Czech Republic was formally registered as an 'independent civic association' in July 1999. It already has 85 members and it is continuing to grow. The current President is Frantisek Drkal, who also represents IBPSA-Czech Republic on the IBPSA Board.

Its biggest source of income so far has been the organisation of IBPSA's 1997 conference, Building Simulation '97, which was held in Prague. Other income has come from organising a Czech national Building Simulation conference in 2000 and a second in early November this year as part of the Czech Republic's Energy Efficiency Business Week. These have received grants from the Czech Energy Agency. Income from the conferences has been enough to make IBPSA-Czech Republic financially stable, although its activities are rather limited by lack of money.

#### **Activities**

IBPSA-Czech Republic's main activities have been:

- the organization of the biennial national Building Simulation conference, which includes a members' meeting
- co-operation with other professional organizations in the Czech Republic
- the creation and operation of its web site
- supporting Czech representation at IBPSA's International Building Simulation Conferences, and
- supporting the dissemination of building simulation technology in Czech Republic through the participation of IBPSA-CZ members as leaders and coordinators in national and international research projects.

The Czech Republic's first national conference on Building Simulation was held in September 2000 in Prague, organised by IBPSA-CZ in cooperation with Czech Technical University in Prague, the Czech Energy Agency and the Society for Environmental Technology. There were about 50 participants and 32 papers, published in proceedings. Several papers were also published in Czech professional journals.

A second national conference on Building and Environmental Technology Simulation was held on 7 November 2002 in the Congress Center in Prague. This was organized in cooperation with SEVEn (the Energy Efficiency Centre) as part of EEBW 2002, the 8th International Conference and Exhibition on Energy Efficiency. Thirty five papers were accepted, and they will all be published in the proceedings. There is more information about IBPSA-CZ's conference on http:// indy2.fsv.cvut.cz/ibpsa (in Czech) and about EEBW 2002 on the conference web site www.svn.cz/eebw/html/index.htm (in Czech) or www.svn.cz/eebw/html/ index-e.htm (in English).

#### Building performance and environmental technology simulation 2002 papers

Computational Simulation of Local Mean Age of Air, M Bartak, CZ The Evaluation of Visual Comfort in the Industrial Hall, E Dolniková, CZ Energy Balancing of No Air-Conditioned Store House, F Drkal & M Bartak, CZ Computer Simulation in Facade Realisation, T Dunovska, CZ Main Office of CEZ, J Dvorak, CZ Intelligent Glazed Facade, M Florian, CZ Modelling of Earth-Water Heat Pump Exchanger Thermal Field, S Frolik, CZ Development of Boiler Controller Algorithm With Numerical Model of Heated Building, M Halada, CZ Heat Transfer Model in Heat Pump Cooled Earth Massive, M Halada, CZ Evaluation of Overheating and Energy Consumption, B Hermanska, Slovakia Dynamic Simulation of Classroom Daylighting in Bratislava, J Hraska & Z Stranak, Slovakia Evaluation of Night Cooling for No Air-Conditioned Office Space, P Chmel & M Lain, CZ Thermodynamic Simulation of Office With Variable PV Shading, M Janak, Slovakia Thermodynamic Simulation as a Tool for Energy Auditing, M Janak & Z Stranak, Slovakia Simulation of Transparent Double-Layer Ventilated Facade, M Janak & Z Stranak, Slovakia Complex CFD Simulation of Solar Heated Space, M Jaros & J Katolický, CZ New Units for Indoor air Quality: Decicarbodiox and Decitvoc, M Jokl, CZ Analysis of Low-Energy Building Energy System, K Kabele, CZ Modelling of Building Energy Systems With Thermal Storage, M Kabrhel, CZ Simulation of the Thermal Comfort of the Room with PCM Material, M Kalousek, CZ Non-Steady State Indoor Environment Analysis in a Building With Heavy Facade, R Kolesar, CZ Computer Simulation in Alternative Cooling Systems, M Lain, CZ Low Energy Cooling, M Lain, F Drkal & M Bartak, CZ Experimental & Numerical Investigation of Room Temperature Distribution, V Merjava, Slovakia Simulation of Energy Use for Heating in Large-Space Industrial Hall, J Mohelnikova, CZ Models of Indoor Environment, O Navratilova, CZ Energy Balance of a Heated Room - a Physical Background of a New Attitude to Heat Expenses Allocation, J Patocka, CZ Cold Air Flow Along the Wall, J Schwarzer, CZ Application of Computer Simulation in Design and Control of Warm Air Heating in Movie Studios, J Schwarzer, CZ Computer Simulation of Solar Facade Moravian Library in Brno, J Sedlak, CZ ETM Method - Modelling of Hydronic Heating System, T Suchanek, CZ Simple Simulation Model According to prEN ISO 13792 and Some Experiences With its Use, Z Svoboda, CZ Energy Balance for Low Energy Row Family Houses, B Sourek & T Matuska, CZ Energy and Indoor Environment Simulation in the Wooden House, J Stefko, P Sedlak,M Jurcak & M Janisin, Slovakia Environmental Building Performance in Total Quality Evaluation, J Tywoniak, CZ Operative Temperature Modelling in the Room With Cooled Ceiling, P Vavra, CZ Modelling of Operative Temperature, Z Veverkova & K Kabele, CZ Influence of Distributed Parameters on Results of Dynamic System Performance, D Vytlacil, CZ Evaluation of Commercial Markets for BCHP Applications, J Wurm & M Czachowski, USA Zone Modelling Tool CONTAMW, R Zdvorily, CZ Temperature and Velocity Field in the Room With Cooled Ceiling, V Zmrhal, CZ

Between conferences, IBPSA-CZ co-operates with other organizations, such as the Society for Environmental Technology (the biggest professional organization in the Czech Republic) and universities, to provide professional support at seminars and conferences. IBPSA-CZ members have participated in several seminars and conferences, as delegates, as members of organizing or scientific committees, and as speakers on building simulation, including:

- Computing for heating systems designers (Prague, 2000)
- the 16th Czech National Heating conference, in a session on 'Computer aided design' (Prague, 2000)
- the first of a planned series of seminars on 'Computing for air-conditioning systems designers' (Prague, 2001)
- Sustainable buildings and solar energy (Brno, 2001)
- the 15th National Ventilating and Air-conditioning Conference (Prague, 2002)
- the second seminar on 'Computing for air-conditioning systems designers', to be held in Prague next year.

Information about all IBPSA-CZ's activities is posted on its web site at http://indy2.fsv.cvut.cz/ibpsa/.

IBPSA-CZ gives members who present papers at IBPSA's international conferences financial support for their travel. There were 5 Czech papers presented at the Prague conference in 1997, 4 at the 1999 conference in Kyoto, and 7 at the 2001 conference in Rio de Janeiro.

Members are involved in numerous research projects which aim to develop practical solutions for industry using building simulation technology. Projects at the Czech Technical University in Prague in the last 5 years include:

- Integrated Design Optimization of Building Energy Performance and Indoor Environment (EC contract)
- Smart Homes On-line Energy Services for Smart Homes (EC contract)
- NAS-Enerbuild RTD (Extension to EC contract)
- Test Reference Year for Building Simulation and Evaluation of Energy Demands of buildings in the Czech Republic (Czech Government Grant Agency contract)
- Introducing Modeling and Simulation into Environmental Engineering (Grant Agency of the Czech Universities contract)
- Computer Simulations of Energy Performance and Thermal Comfort of the Louxembourg Plaza Complex in Prague (ORCO Property contract)
- Use of energy performance simulation for operation cost distribution in a multipurpose conventional center, the Congress Center at Prague (CTU contract)
- Low-energy, Low-cost house SEVEN Prague (CTU contract).

#### The future

We hope that IBPSA-CZ has a good professional basis in the universities. Many building and HVAC design practitioners are already aware of building simulation technologies and the benefits of environmental performance assessment of building designs.

However, as yet, few Czech practitioners have expertise in using these technologies. This will quickly change as performance based standards for building are introduced, understanding develops further through research on practical case studies, and the building industry's capability improves through appropriate training, continuing education, and the efforts of societies such as IBPSA.

Our plans for expanding IBPSA-CZ's activities include:

- extending our cooperation with practice through expert consultancy on building projects and by disseminating simulation technology to design and consulting offices
- getting more simulation technology into graduate and postgraduate studies, and into continuing education (in the latter case, mainly on the practical use of simulation for better design and energy utilization)
- developing a reliable database of component and climatic data for modeling and simulation.

# **IBPSA-France**

#### Gilles LeFebvre

IBPSA-France currently has around 70 members (including some who are members thanks to a collective subscription from an institution), about the same as last year. Its main concern at the moment is its organisational development.

We organise a national conference every two years, between IBPSA's international conferences. The most recent was held on 17 and 18 October at Gaz de France, La Plaine Saint Denis, in the north suburbs of Paris. Twenty two papers were accepted and presented orally in 8 sessions. An additional session was dedicated to software, with a short presentation followed by demonstrations of 3 programs. Proceedings were offered free on CD at the beginning of the conference, and a printed version is available to buy.

Serious discussions have been held between IBPSA-France and AICVF (Association des Ingénieurs en Climatisation Ventilation et Froid, www.aicvf.org), which has around 2000 individual members and 80 institutional members. AICVF is organised in technical subgroups which have particular targets and are handled by specific teams, and it would be possible for IBPSA-France to become one of these. The technical aspects of this change are being studied by both organisations and by a lawyer, and Roger Pelletret will present proposals at the next IBPSA-France general meeting. We expect the transition to be complete before the spring of 2003.

Full contact information for IBPSA-France is on page 4

The near future will be dedicated mainly to this process, to the organisation of the new IBPSA-France inside AICVF, and to the development of a new programme of activities which take advantage of the extra facilities AICVF can provide.

Full contact information for IBPSA-Czech Republic is on page 4

## **IBPSA-Japan**

In the past two and a half years, IBPSA-Japan has:

- held two annual meetings, in June 2001 in Kyoto (attended by 56 people) and June 2002 at Kogakuin University in Tokyo (attended by 54)
- published two newsletters, in May and August 2002, and
- sent 16 delegates to BS'2001 at Rio de Janeiro.

Six papers were presented at the first annual meeting:

- Thermal Simulation System TRNSYS/COMIS with IISiBat, Y Utsumi
- Factor Analysis of Heat Island Phenomenon using Revised Architecture-Urban-Soil Simultaneous Simulation Model AUSSSM, J Tanimoto
- On the Development of Thermal and Airflow Network Model, H Okuyama
- The Design of Optimized HVAC Operation and Optimized Equipment Capacity Considering Building Thermal Storage, T Nagai
- On the Weather Data AMeDAS for Thermal Simulation, S Matsumoto
- On the Simulation Program BECS/CEC/AC for the Energy Conservation Code, T Ino-oka

and twelve at the second:

- Simulation of Energy-Consumption on Apartment-House, M Mae
- Simulation of Central Type of Space and DHW Heating system for Multi-family Houses, M Satoh & M Udagawa
- Verification of Thermal and Airflow Model Simulation Program NETS, Okuyama
- DAIKUKAN : A Computer Simulation Program for Thermal Environment and Heat Load Considering Vertical Air Temperature Distribution, K Ishida
- Key Points for Total Energy Simulation for Detached Houses, K Nomura, T Hayashi, S Kojima and T Hosokawa
- Roles of Building Environment Simulation in Architectural Design Process, H Fujii
- Ventilation Design System for Diagnosing IAQ and Designing Ventilation, Y Utsumi & H Kobayashi
- Economic Feasible Study of Cogeneration Systems by Using Optimal Design Method
   Effects of Energy Charge on Plan of Cogeneration Systems, M Yanagi, S Waragai and H Ishino
- A Development of AUSSSM Tool Based on the Revised Architecture-Urban-Soil Simultaneous Simulation Model, J Tanimoto & A Hagishima
- A Study on Evaluation of Spectral Environment in the Space of Interior and Outdoor, M Ichinose, H Ishino & A Nagata
- Design, Construction and Predicted Basic Behavior of Twin Test Chambers for Room Environmental System Studies, T Nobe, M Udagawa, K Ohashi & H Takanobu
- Fault Simulation and Commissioning of HVAC Systems Using HVACSIM+, M Zheng & N Nakahara

In the future, IBPSA-Japan plans to:

- hold an annual meeting each year, including technical papers
- publish two newsletters each year, with:
  - a review of the status of the simulation in the world
  - articles by researchers worldwide
  - news of academic society in Japan
  - news and information about IBPSA's international conferences, and
  - links to other societies
- make Japanese simulation technology better known by encouraging Japanese authors to:
  - submit papers to BS2003
  - write articles on selected themes, and
  - submit papers to *Energy and Buildings* and other journals.

The current officers of IBPSA-Japan, serving until September 2003, are:

President	Mitsuhiro Udagawa, udagawa@cc.kogakuin.ac.jp	
Vice-President	Yasuo Utsumi, utsumi@miyagi-ct.ac.jp	
	(also responsible for planning, and newsletter editor)	
Vice President	Hiroyasu Okuyama, okuyama@sit.shimz.co.jp	
	(also responsible for public relations and planning)	
Treasurer	Yasuo Utsumi	
Manager	Jun Tanimoto, tanimoto@cm.kyushu-u.ac.jp	
	(public relations and planning)	
Secretariat	Yasuo Utsumi	
	Miyago National College of Technology	
	Department of Architecture	
	Natori Miyagi, zip.981-1239, Japan	
	tel 022-381-0298 fax 022-381-0298	

## **IBPSA-Netherlands+Flanders**

Jan Hensen, Chairman IBPSA-Netherlands+Flanders

IBPSA-NVL (Nederland + Vlaanderen) has been an incorporated association since January 2002; the bylaws are available from www.ibpsa-nvl.org.

The first official annual meeting will take place in December 2002. Members present will be asked to approve a slate of officers and board members consisting of Jan Hensen (chair and IBPSA Board representative), Wim Maassen (secretary), Wim Plokker (treasurer), Hans Buitenhuis (co-operating associations), Klaas Visscher (research), Kees Arkesteijn (education), Ed Rooijakkers (practice), Laura Itard (public relations) and Piet Standaert (Flanders). As indicated, each board member is responsible/contact for specific activities. Currently IBPSA-NVL have work groups on:

- coupling of models (Buitenhuis)
- Newsletter (Loomans)
- CFD (Loomans)
- Flanders (Mlecnik)
- matlab/simulink (Van Schijndel), and
- quality assurance (Visscher).

The board members, officers and work group leaders are a mixture of academics, researchers from large research institutes (TNO, ECN, etc) and practitioners.

IBPSA-NVL works together with a number of other associations interested in building services, building physics, acoustics, etc. Any member of these associations may join IBPSA-NVL without paying any fee.

Membership administration will soon be automated through our web site, which will be fully operational later this year. This will give us a better view of our membership numbers. The best current approximation to our membership is our mailing list, which includes about 120 names. We anticipate that this will grow to about 350.

IBPSA-NVL is financed by sponsors — at the moment mostly in kind through the board member institutes — and profits from activities such as our annual conference series (Delft 1999, Eindhoven 2000, Petten 2001 and Antwerp 2002).

Apart from our annual conferences, our activities have focussed on our website and on special issues in the magazines of co-operating associations — for example in the TVVL Magazine at www.tvvl.nl, where we had a special issue in 2001 and in 2002. We will be publishing the first issue of our Newsletter later this year. At the moment, of course, our main concern is the organization of Building Simulation 2003 in Eindhoven.

Full contact information for IBPSA-NVL is on page 5 In general there are more ideas than resources, both financially and in terms of person power. However, given the enthousiasm and pro-active participation of growing numbers of individuals, we are confident that we will reach a viable and stable situation in the next few years.

## **IBPSA-Scotland**

#### **History and structure**

The Scottish Energy Systems Group has been in existence for three years and became the Scottish Affiliate of IBPSA approximately one year ago.

We held our first Annual General Meeting as IBPSA-Scotland in May 2002. This was attended by around 60 delegates from member and potential member organisations.

The meeting agenda included presentations by representatives from the Scottish Executive's Energy Efficiency Office, speakers from member companies who are in the process of adopting a modelling approach to design, and academics and software vendors.

IBPSA-Scotland/SESG is a membership organisation which exists to help the construction industry adopt a computational approach to the design and operation of buildings. Traditionally, building designers have been reluctant to adopt modelling in practice due to the perceived barriers. The aim of SESG is to tackle the barriers head-on by providing intensive in-house training on software in the context of live projects, supported by a programme of seminars and workshops on topical issues and of longer 'residential' training courses which allow the development of greater technical competencies.

IBPSA-Scotland is jointly funded by industry, the Scottish Executive, Scottish Enterprise and the Scottish Energy Environment Foundation, and comprises a spectrum of building related organisations:

- architectural and engineering practices
- local authorities
- component manufacturers
- utilities
- renewable energy specialists
- software vendors, and
- research bodies.

IBPSA-Scotland/SESG's objective is to help these organisations gain experience with all aspects of energy and environmental modelling and to identify barriers to the uptake of simulation imposed by their current work practices. The long term goal is to help companies to evolve in three important respects:

- enhanced performance robustness through integrated design
- better productivity through reduced design development times, and
- improved competitiveness through the greater potential for inter-organisational collaboration.

These activities are co-ordinated and managed by Jon Hand and Iain Macdonald.

IBPSA-Scotland/SESG currently has around 50 corporate and 50 individual members. Corporate members pay fees of £500 a year, but individual memberships are free (and have the same benefits).

The premises underlying the SESG initiative are as follows:

- 1 That in the context of energy systems design there exists an urgent need to reduce the gap between system specification and life cycle performance assessment.
- **2** That existing modelling systems provide a means to bridge this gap and so reduce design response time.

- **3** That the ability to address the complex dynamic interactions, and multi-variate issues inherent in energy systems will enhance product robustness.
- **4** That there exists a need to move such analyses towards the early design stage to better support design concept synthesis where the potential impacts are greatest and least costs committed.
- **5** That the early design stage activity can be supported through the creation of appropriate computer-based, decision-support environments.
- **6** That a critical mass of specialist energy modelling knowledge currently exists in the UK which is in danger of being dissipated with the demise of the regional dimension of EDAS.
- **7** That computational tools and facilities required by the industry and the expertise to use them will only be developed through collaboration between the user and developer communities.
- **8** That virtual design technologies will enable co-operative working between disparate partners.

SESG is overseen by a Management Committee which includes representatives from a cross section of the relevant industry sectors:

- model vendors
- professional institutions
- lobbying organisations and action groups
- local authorities
- private design consultants
- utilities, and
- the Scottish government.

#### **Activities**

We launched our events programme for the next three years at the AGM in May. This is designed to assist and support companies wishing to drive simulation into their day to day work practices, and will be the main focus of our activities for the new phase of the group. The programme is based on monthly, themed activities, and includes seminars, software training events and follow-up diagnostic workshop reviews of the month's activities. The plans for the new programme were distributed to our members in August and so far we have had an excellent response to events on the use of simulation in improving Energy Efficiency, Indoor Air Quality, Design Integration and Building Regulations, with an event on Advanced Lighting Systems about to take place. We have appointed an events coordinator (Kathleen Whyte) to oversee the running of the programme.

Full contact information for IBPSA-Scotland is on page 5

IBPSA-Scotland has recently received funding for its Supported Technology Deployment Programme, which offers design companies free training, hardware and software at no cost. This will support 2-5 people full-time for the next 3 years.

# **IBPSA-Slovakia**

Jozef Hraska, Slovak Technical University, Chairman IBPSA-Slovakia

IBPSA-Slovakia operates as a branch of the the Slovak Society for Environmental Technology (SSET). It has 32 members, and is financed from (very small) membership dues and income from the organization of seminars, conferences and exhibitions within the framework of SSET.

Our main activities are seminars and conferences, mostly in co-operation with SSET. Our biggest event so far has been Building Simulation 2002, which we co-hosted with IBPSA-Czech Republic in Prague on 7 November 2002.

IBPSA-Slovakia's current officers are:

Chairman	Jozef Hraska, who lectures on the energy efficiency of
	buildings at the Slovak Technical University in Bratislava
Secretary	Ladislav Pirsel, who works on environmental control and
	thermal comfort at Johnson Controls in Bratislava
Treasurer	Milan Held, an engineer specializing in indoor air quality

Full contact information for IBPSA-Slovakia is on page 5

IBPSA-Slovakia shares the SSET web site at the moment, at **www.sstp.sk**; a dedicated site is under construction.

# **IBPSA-USA**

Les Norford, MIT, President IBPSA-USA

#### **Structure**

IBPSA-USA operates as a legally incorporated organisation. Membership jumped after the announcement in January 2002 that IBPSA-USA has joined the many other regions which charge no annual membership fee, and currently stands at 114. It now relies for its income on its share of the profit from the international meetings and nominal fees for attendance at its semi-annual meetings. This is enough for planned activities.

A new board of directors for 2002-3 was elected by the expanded membership in February. The new officers and board members are:

President	Les Norford
Vice-President	Phil Haves
Secretary	Rick Strand
Treasurer and IBPSA affiliate rep	Chip Barnaby
Member	Jeff Spitler
Member	Curt Pedersen

#### **Activities**

IBPSA-USA's main activities are its semi-annual meetings, held in conjunction with ASHRAE national meetings. Because available funds can underwrite about half the cost, attendance is sufficient (30-40) for lively meetings. The winter meetings include demonstrations of software from vendors and others, while the summer meetings allow time for members and guests to discuss topics of interest. All meetings include dinner and an after-dinner speaker.

More than 40 IBPSA-USA members met in Atlantic City on 12 January 2002 in our now-traditional dinner meeting format. A pre-dinner software demo session featured about seven developers showing their latest work. After dinner, Chip Barnaby conducted a short business meeting, and the event concluded with a slide-illustrated talk by Les Norford (Massachusetts Institute of Technology) on 'Studies of Buildings in the Lands of Borsch, Curry and Tofu'. Les reported on his work on applying building science and simulation to various projects in Russia, Pakistan, and China.

Another meeting held in Honolulu on 20 June was attended by about 25 members. Predinner discussion focused on local and regional activities that could promote building simulation to the broader design community. After dinner, Mike Holmes of Ove Arup & Partners, London, presented 'From Jurassic Park to the Garden of Eden', a review of creative uses of building simulation to meet the needs of a consulting engineering practice in a wide variety of design projects.

The next IBPSA-USA meeting is scheduled for 25 January 2003, in Chicago.

More details of IBPSA-USA's past meetings and future programme are available at www.ibpsa.org/ibpsa\_usa/.

#### The future

In the future, IBPSA-USA hopes to focus on outreach to the design professions — both architects and engineers — by offering speakers on the topic of simulation. These talks will make use, at least in part, of presentation materials that IBPSA-USA hopes to procure by contract. It is planned to prepare and release a request for proposals for this work before the end of 2002. Another possible activity is a series of half- or full-day workshops on simulation, conducted at a regional level.

It remains to be seen whether members are willing to put significant effort into reaching outside the organization. Meetings are entertaining and a way of networking with like-minded professionals. However, they do little to bring simulation to the desktops of practitioners who could benefit from it. Effort will need to be at a regional level to reach those who lack the time and budget to attend the IBPSA international conferences or the IBPSA-USA semi-annual meetings. It is hoped that if IBPSA-USA pays for appropriate lecture materials, its members will look for (as at local ASSHRAE or AIA meetings) or make (as with seminars sponsored by IBPSA-USA regional members) opportunities to serve the profession.

Full contact information for IBPSA-USA is on page 5

# Software news

## HVACWare announce new weather file convertor TMY2BIN

#### Randy Wilkinson, HVACWare

TMY2BIN is the newest addition to HVACWare's growing list of software for HVAC and energy professionals. It can convert TMY2 hourly weather files into bin weather data. Unlike other sources of bin weather data, this one is very flexible with occupied hours vs. unoccupied hours.

The program converts TMY2 weather files (available for free on the Internet) into comma delimited bin weather data for quick energy calculations. The program currently operates in US imperial units only. You can choose to create 2 degree, 4 degree, 5 degree, or 10 degree temperature bins. There is also an 8760 hourly output option so you can perform more detailed studies. The 8760 hourly output also includes the relative humidity for each hour, for analyzing problems where latent heat is not negligible. The converted bin weather data is usable in any spreadsheet or database program.

TMY2BIN costs \$25 US.

For more information, go to http://www.hvacware.com.

🖷, TMY2 Parse			TMY2BIN in action
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### HVAC extensions to the IFC data model of buildings

#### Vladimir Bazjanac, Lawrence Berkeley Laboratory

The International Alliance for Interoperability (IAI) has been developing an object oriented data model of buildings, the Industry Foundation Classes (IFC). The next release of the IFC model, scheduled for Q2 2003, will now include definitions of HVAC equipment and systems. This will make it possible to make HVAC related software, including building energy performance simulation tools, IFC compatible and capable of directly exchanging data with other IFC compatible software.

With the addition of the extended HVAC schemata, it will be possible not only to seamlessly import building geometry definitions created by CAD applications, but also import and export data that define HVAC equipment and systems as well as their performance. Users of interoperable tools will be able to import equipment data and performance specifications, compare and select what they need based on performance or cost, design and specify systems, simulate performance, export data they generate themselves, and more. Manufacturers will be able to provide product information in a common way so that all interoperable tools have direct access to it. Users of "downstream" applications that use HVAC data will be able to import data directly from applications that generated them "upstream."

Basic documentation of the IFC HVAC definitions is already available, so interested developers can start planning the implementation of IFC HVAC definitions in their software.

The HVAC extension schemata to the IFC data model of buildings were developed at the Lawrence Berkeley National Laboratory as part of the 'BS-8' project. The project is funded by the U.S. Department of Energy and the California Energy Commission, and involves collaborators from thirteen organizations in eight foreign countries. Current project work is focused on the development of a comprehensive EnergyPlus data interface to the IFC model.

For more information contact Vladimir Bazjanac at LBNL, v\_bazjanac@lbl.gov.



# **IBPSA Board business**

On 7-8 October, the IBPSA board met at the TU/e (Technical University of Eindhoven) to discuss the upcoming BS'2003 conference to be held there in August 2003 and to handle other business matters.

A most recent issue of utmost importance to the broad membership was the constituency of the board. In a recent vote, the worldwide membership unanimously approved the proposal that a representative from each IBPSA Affiliate be a full voting member of the board. The board ratified that vote at its meeting in Eindhoven. This means that in future board meetings, all Affiliates will



be privileged to have a voting representative at all board meetings.

The next board meeting will be held immediately following the BS'2003 conference in Eindhoven. Affiliates are encouraged to elect a representative for this role far in advance of the meeting, so effective communications can begin to take place now.

Other issues discussed were the IBPSA conference procedures, placement of conference papers on the IBPSA web site, research awards and travel scholarships for students to present papers at future BS conferences.

The board also toured the TU/e campus, found some interesting sculptures and general scenery, and examined the conveniently located conference facilities. The board found lots of empty auditorium seats and invites the full membership to try to fill these seats for BS'2003.



This edition of ibpsaNEWS was designed and produced by David Bartholomew Associates, U.K., marion@bartholomews.plus.com. © International Building Performance Simulation Association 2002

# **IBPSA Membership Information Sheet and Application**:

The following information is for membership and orders for IBPSA proceedings. You may order directly from the forms below, or you can request by e-mail a hard copy of the request sheet. Conference proceedings are not part of the membership fee, though they are significantly discounted for members. We are not able to process credit card orders at this time.

IBPSA is comprised of International Regional Affiliates. If you are located within one of the affiliated regions listed on the IBPSA website at <u>http://www.ibpsa.org/regional.htm</u>, please contact the appropriate representative regarding membership in IBPSA. If you are not within any of the affiliated regions, you may join IBPSA central by using the attached form.

Members of the affiliate organization are automatically considered full members of IBPSA-Central. If you are joining IBPSA, please inquire as to the affiliate organization in your region. Additional affiliates may be forming soon.

The IBPSA Newsletter is published twice annually. It contains instructions on how to create an IBPSA affiliate in your region (start-up grants are available from IBPSA), as well as announcements for Building Simulation Conferences. All members of IBPSA's Regional Affiliations receive the newsletter.

TO LEARN MORE ABOUT IBPSA in general, look at the World Wide Web page at "http://www.ibpsa.org"

Thank you for your interest in IBPSA. Join to get more news from the Newsletter.

Jeff Haberl, IBPSA Publications jhaberl@esl.tamu.edu

# **IBPSA MEMBERSHIP INFORMATION**

"The professional association devoted to improve the built environment through computer simulation and analysis"

## Mission

The International Building Performance Simulation Association (IBPSA) was founded to advance and promote the science of building performance simulation in order to improve the design, construction, operation and maintenance of new and existing buildings worldwide.

# Goals:

Along with building designers, owners, operators and developers,

- \* Identify problems with the built environment that may be solved by improved simulation tools and techniques
- \* Identify the performance characteristics of buildings on which simulation should be focused
- \* Identify building performance simulation R & D needs and transfer new developments to the user
- \* Promote standardization of the building simulation industry

\* Inform and educate its members and the public regarding the value and the state-of-the-art of building performance simulation.

# Activities:

- \* Biannual International Building Simulation Conference.
- \* Resource publication on simulation tools (under development)
- \* Newsletter announcing upcoming events and software tools.
- \* Sponsorship of regional workshops and seminars on simulation.

MEMBERSHIP APPLICATION For IBPSA Central
Membership Classification Desired (check one): Effective date: Sept. through Aug.
Sustaining member US\$ 500/year An individual, company, or institution in related practice.
<u>Member</u> US\$ 75/year A graduate from a college or university, or a registered professional engineer or architect.
Student Member US\$ 25/year An individual who is a full-time student (Include copy of current enrollment i.d.).
Amount Enclosed: US\$
Name:
Title:
Organization:
Street Address:
City, State,Zip:
Country:
Telephone: Fax:
e-mail address:
Please pay by Check or International M.O. to: Karel Kabele, IBPSA Secretary Czech Technical University in Prague Faculty of Civil Engineering Dept. of Microenvironmental and Building Services Engineering Thakurova 7 166 29 Prague 6, Czech Republic Tel.: +42-2-2435-4570 Fax: +42-2-2435-4570 Email: kabele@fsv.cvut.cz
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# International Building Performance Simulation Association The regionalization of IBPSA <u>To whom it may concern</u>

Dear Colleague:

You may be aware of the International Building Performance Simulation Association (IBPSA) which has existed since the late 80s to represent and promote the application of computer-based design and management techniques in the construction industry worldwide.

To further the goals of the organization, we have embarked on a regional development program by which we plan to stimulate the establishment of regionally based, autonomous organizations who are affiliated to IBPSA. In this way we hope to achieve the correct balance between the servicing of practitioner needs at the local level and the provision of information flow at the international level.

I am writing to you to ask whether you might be interested in exploring further the possibility of establishing an IBPSA affiliated organization in your part of the world. To help you reach a decision, there follows details on the regionalization proposal. A copy of IBPSA's Strategy Plan, IBPSA's By-Laws and more general information about IBPSA's activities, biannual Building Simulation conferences, etc. is available from its web site at: <u>http://www.ibpsa.org/</u>

IBPSA very much hopes that you will see merit in this idea and is looking forward to receiving your reply in the near future.

Yours sincerely

The IBPSA President

# **IBPSA Regionalization Guidelines**

# **IBPSA's Mission**

The International Building Performance Simulation Association (IBPSA) is a non-profit making organization that was first incorporated in January 1987. The Association's principal mission is to promote and advance the practice of building performance simulation in order to improve the energy and environmental performance of new and existing buildings worldwide.

IBPSA seeks to achieve its goals through the establishment of a range of products and services aimed at informing and equipping those who are involved in the construction industry and who seek to utilize computer-based tools to good effect. To this end, the **IBPSA Strategic Plan** identifies nine specific areas that encompass the organization's activities. These are:

- **1.** *Strategic Alliances* with professional organization such as the engineering and architectural societies. The intention is to engender a better understanding of the profession's requirements and the technology's potential.
- 2. *International Conference Series* to periodically collate and preserve those developments that comprise the current state-of-the-art.
- 3. *Technical Development Program* aimed at influencing the direction the technology of building simulation might take at any given point in time.
- 4. *Educational Initiatives* concerned with the teaching of building simulation in the higher education institutions and in the context of continuing professional development.
- **5.** *Harmonization Activities* in an attempt to regularize the application of the different modeling systems through the definition of standard methods for performance assessment and the provision of standard support data.
- 6. *Member Recruitment* aimed at extending the IBPSA products and services to those practitioners who can most benefit from the new technology.
- 7. *Products and Services* devised in response to the profession's evolving needs.
- 8. *Technology Transfer* concerned with the delivery of training in all aspects of computer-based performance assessment at all stages of the building life cycle.
- **9.** *Regional Development* to subject the foregoing activities to appropriate regional influences and enable their effective delivery.

This document addresses the last area concerned with regional development in order to more effectively address local needs and create a mechanism for an international exchange of know-how and best practice.

# Rationale

IBPSA has achieved significant success at the international level - largely through its biannual conference program (Vancouver '89, Nice '91, Adelaide '93, Wisconsin '95 and Prague '97) and worldwide electronic mailing facility. IBPSA has also recognized the difficulties surrounding the development of products and services that are appropriate to the day-to-day needs of its members.

The underlying causes of these difficulties are twofold. Firstly, the geographical spread of IBPSA members is wide and gives rise to a requirement to cover disparate work practices, technologies and professional needs. Secondly, IBPSA's organizational structure is such that the coordination of activities at the local (regional) level is problematic. At the same time like-minded, but regional, organizations are making significant progress at the local level through their seminar, workshop, publications, training and software development activities.

If the construction industry were to be well supported in its attempts to harness effectively the emerging IT and simulation technologies then the establishment of regionally based support organizations was essential. Equally essential was the creation of a structure by which these organizations could affiliate in order to disseminate their know-how and promote their local best practice. Only in this way could the benefits of the new technology be understood and future standardization enabled. It was with the view of a network of autonomous regional organizations that IBPSA has turned to regionalization and is encouraging existing or newly formed groups to become IBPSA affiliates.

## **Structure and Operation**

Under the existing structure, IBPSA affiliates are financially and administratively independent. In practice, this means that they raise and deploy their funds as long as these funds are under the control of elected officers and are used in pursuit of aims and objectives that are consistent with those of IBPSA. IBPSA-Central concentrates its resources on issues such as inter-region communication, international conferences and product standardization. In this way IBPSA complements and empowers the regional affiliates in their attempts to inform and support their members in the context of local design issues and concerns. The entire IBPSA network is represented by a 15-member Board comprised of an executive and regionally elected officers.

The following guidelines have been devised to assist with the establishment and operation of an IBPSA regional affiliate.

- Organizers of a new regional affiliate should prepare a brief proposal for the IBPSA Board of Directors. This should outline the proposed name, geographic territory, organizational structure and goals and objectives (if different from those included in the IBPSA charter statement). Affiliation depends only on the organization having a purpose and mission consistent with those of IBPSA. The Affiliate and IBPSA then enters into a specific agreement by defining their working relationship based on regional considerations prevalent at the time.
- 2. Regional affiliates may be named **"IBPSA <region>"** or they may use any other appropriate name. Their letterhead and other publicity material should indicate that they are "an affiliate of IBPSA".
- 3. For regions with limited financial resources, IBPSA can provide a limited amount of **matching start-up funds** (see below) to aid the initial set-up of the affiliated organization. A case for support should be submitted to the IBPSA Secretary for consideration by the Board. (See attached proposal guidelines.)
- 4. The financial structure of a regional affiliate is independent from IBPSA. This means that affiliates will retain all member dues or other funds raised by their activities.
- 5. IBPSA will provide affiliates with a list of operational guidelines (see attached by-laws), contact information for persons available to assist the local organizer and electronic images of the IBPSA logo.
- 6. The regional affiliate will provide membership data to IBPSA for use in mailing IBPSA materials.

- 7. Members of the regional affiliates will automatically be full members of IBPSA. Any given individual or organization will pay dues directly to IBPSA only if there is no regional affiliate operating in their area.
- 8. IBPSA will make newsletters and other IBPSA materials available to all members of the regional affiliates either in printed form or in downloadable electronic format from the IBPSA web page. This will be at no cost or at a nominal cost depending on the circumstances. Other services may be provided by IBPSA to the regional affiliates for a fee.

# **Start-up Proposal Guidelines:**

It has been the IBPSA Board's policy to grant start-up funds to regions that are in need of matching funds to get the organization officially registered and/or to purchase initial office support equipment. The proposal should be submitted to the IBPSA board and should contain the following elements:

- 1. Name of Affiliate: i.e., IBPSA-<region>.
- 2. Geographic territory covered.
- 3. Organizational structure The IBPSA Charter is founded on a set of board- and memberapproved by-laws (see attached). Each Affiliate's organizational structure is therefore expected to adhere to the same or similar principles of operation.
- 4. Officers -- i.e., Specify the officers that will be constitute the board (e.g., Chairperson, secretary, treasurer, etc. see IBPSA by-laws)
- 5. List of goals and objectives Must be consistent with the mission statement and objectives of the IBPSA Charter.
- 6. Minutes of the first organizational meeting, indicating organizational business transacted.
- 7. List of initial members and their affiliations (can be those attending the first meeting).
- 8. Proposed activities of the affiliate.
- 9. Proposed amount of annual membership dues.
- 10. Breakdown of costs associated with set-up of the Affiliate organization.
- 11. Amount of matching funds provided by the Affiliate.
- 12. Amount of the requested support from IBPSA. \*

<sup>\*</sup> Please note that IBPSA's policy is to provide start-up funds with the expectation that the Affiliate will return the granted amount once the region reaches financial stability. The Affiliate is therefore asked to return the funds on a voluntary basis, so other regions can be assisted in the same fashion.

# Becoming an IBPSA Affiliated Organization

If you would like to become an affiliated organization then please write to the IBPSA Secretary at the address given at <u>http://www.ibpsa.org</u>. Alternatively, you may wish to discuss the matter further with one of the IBPSA office bearers or a representative of one of the existing affiliates whose addresses can also be found at <u>http://www.ibpsa.org</u>.